

**ABSTRACT**

A division operation is simulated by performing multiple subtractions, in parallel, each of which represents the subtraction of a different multiple of the divisor from the dividend. Each subtraction produces a possible remainder value, but only one subtraction will result in a valid remainder - the one representing the divisor multiplied by the actual quotient that would result from the division operation - and that remainder is then identified as the modulo output of the division operation.